allow it to resume the water supply operations interrupted by Auburn Dam construction activities, and to expand its diversions, consistent with existing water rights, to address increasing demands for water due to population growth in the PCWA service area.

It is PCWA's position, then, and not necessarily Reclamation's, that PCWA is not undertaking any discretionary actions that would constitute the sole or even primary cause of the bifurcation of the Auburn-to-Cool Trail. Instead, responsibility for loss of the Auburn-to-Cool Trail lies primarily with Reclamation, as the entity responsible for closing the tunnel and returning the North Fork American River to its historic channel. These distinctions follow from the very nature of the agency decisions at issue. Thus, the Proposed Project should be understood as a combination of two independent but closely related actions in which Reclamation proposes both to restore the river and to build PCWA a new pump station, and PCWA proposes to enter into a contract accepting ownership of such new facilities, and operate them for water supply purposes, thereby relieving Reclamation of its obligations under the Land Purchase Contract.

Because, from a CEQA standpoint, PCWA's actions will not be the primary cause of the impacts on the Auburn-to-Cool Trail, PCWA cannot be solely responsible for attempts to mitigate those impacts. Instead, assuming that PCWA is only partly responsible for the impact, PCWA staff, as co-author of the Final EIS/EIR, recommend that the PCWA Board allocate a maximum of $500,000 towards future construction of a river crossing or similar mitigation – *if*, after a project-specific NEPA/CEQA process, Reclamation and CDPR choose to proceed with such a crossing, and only at a point in time at which the pump station has cleared all regulatory and other legal hurdles, so that it is clear that a new pump station actually will be built and operated. Such an amount is intended to approximate what might be called a "fair share" contribution to the total estimated costs of such a process and such a crossing, which are currently estimated to be $1.5 million.

Reclamation agrees with PCWA that the most appropriate venue for considering a new crossing is a separate planning and environmental review process, such as the pending update of the General Plan/Resources Management Plan for the Folsom Lake SRA. Reclamation, therefore, further believes that the current EIS process for the American River Pump Station Project is not the proper vehicle or venue for developing a potential crossing or other means of preserving a multi-use route between Auburn and Cool. For these reasons, Reclamation does not, as part of this process, propose any mitigation measure addressing Reclamation's contribution to impacts associated with bifurcation of the Auburn-to-Cool Trail. Importantly, though, Reclamation will cooperate in any CDPR-initiated planning and environmental review process addressing a proposal to build a crossing with state- or local-funding.

As to PCWA, there is legal authority under California law suggesting (by analogy) that such a contribution can constitute sufficient mitigation for any impact caused by PCWA's activities. This analogous authority provides that, where a particular project will incrementally contribute to a larger cumulative impact, the project's incremental contribution can be adequately mitigated if the project "is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact." (Cal. Code Regs., tit. 14, div. 6, ch. 3 ["CEQA Guidelines"], § 15130, subd. (a)(3)). Although the bifurcation of the Auburn-to-Cool Trail is not, strictly speaking, a "cumulative impact," it is analogous in the sense that the impact is caused either by Reclamation, acting alone, or by Reclamation and PCWA acting together. Thus, a "fair

share" contribution to a new bridge is a fair and reasonable means by which PCWA can attempt to facilitate the ultimate approval and construction of a replacement river crossing or similar mitigation measure (e.g., construction of a new multi-use trail allowing mountain bikers and others to use the Highway 49 Bridge or Mountain Quarries Bridge to cross over the North Fork American River).

Because any such crossing will involve environmental issues requiring project-specific analysis, and all actions necessary to implement a replacement crossing must be taken by entities other than PCWA, another and separate environmental review process will be required. Such a process will likely involve preparation of a joint NEPA/CEQA document, with Reclamation and CDPR acting as joint lead agencies.

PCWA and Reclamation have had numerous conversations with CDPR and the Resources Agency of the State of California, in which the latter entity has indicated that it will devote a total of $1 million to environmental review for a replacement river crossing and, eventually, construction of such a project – if, that is, the resulting environmental impacts are deemed acceptable after compliance with NEPA and CEQA.

CDPR and Reclamation will have to decide between themselves exactly how to proceed with environmental review for any bridge proposal. The two most likely possible approaches are (1) to prepare a project-specific environmental document focusing solely on the bridge and alternatives and (2) to fold bridge planning into the pending revision of the General Plan/Resource Management Plan for Folsom Lake SRA, which is contiguous to Auburn SRA. Under either approach, the two agencies will focus their efforts on identifying the best possible location for a new crossing or other measures that can mitigate the impact of the bifurcated Auburn-to-Cool Trail.

Project Area Trails and Recreation Uses and Plans

The Proposed Project would result in improved trail conditions and river access near Oregon Bar. Project design includes measures to minimize mixed-use conflicts so that equestrians, boaters and pedestrians can safely enjoy the area. The No Action/No Project and Upstream Diversion alternatives would maintain river flows through the bypass tunnel. The tunnel is considered to pose a safety hazard and keeping it open is in conflict with direction given by the State Attorney General's office. This would be a significant impact.

The increased recreation use at the site would generate additional demand for parking at the North Fork/Middle Fork confluence. Because of the already impacted conditions on peak recreation days, this would be considered a significant, unavoidable impact. As with other recreation issues in the Auburn SRA, Reclamation and CDPR would develop long-term management goals, policies and programs as part of the upcoming comprehensive plan. The Action Alternatives would not result in conflict with the American River Parkway Plan or state and federal Wild and Scenic River acts' designations.

Whitewater Boating Opportunities

The Action Alternatives would result in changes in operation of the MFP to continue to meet water supply and environmental instream flow requirements. Modification of releases would affect the

frequency and duration of Middle Fork river flows that provide suitable whitewater rafting flows. Although the analysis of potential impacts upon whitewater boating on the Middle Fork American River is considered conservative, the loss of recreation opportunity would be considered a significant impact upon river boaters and commercial rafting. The Proposed Project river restoration element provides increased river rafting opportunity along the North Fork American River below the confluence. Although the anticipated Class I to Class III character of the restored river section would not provide a replacement for the more challenging boating opportunities lost on the Middle Fork, it would open up an additional reach of the river for boating activities not currently available in the project area. It is also noted that CDPR would not propose or permit commercial river rafting in this reach of the American River as part of the Proposed Project. Increased boating opportunities in the project area would not exist under the No Action/No Project or Upstream Diversion alternatives.

Diversion-Related Recreation Effects in Regional Water Bodies

Water-based and enhanced recreation would not be adversely affected along the upper or lower American River; upper or lower Sacramento River; Feather River; Delta; or Folsom, Shasta, Trinity, or Oroville reservoirs under any of the alternative conditions. However, cumulative conditions would result in potentially significant impacts upon recreation opportunities during some months or years for the lower American River, Feather River, Folsom Reservoir boating and swimming, Shasta Reservoir boating, and Oroville Reservoir activities. Further assessment of these conditions indicate that the Action Alternatives would not have a substantial or considerable contribution to these conditions.

Visual Resources

The visual character of the project area would not change substantially under the No Action/No Project or Upstream Diversion alternatives. The Proposed Project would provide an enhancement of the local viewshed through river restoration and closure of the bypass tunnel. Construction activities would involve use of up to 54 construction vehicles (heavy equipment) and up to 50 construction workers during peak activity; however, views of the site are limited to portions of the pump station location and parts of access roads. Few receptors have views of the Auburn Dam batch plant site where the Proposed Project would result in construction of a "rustic" parking area associated with the Oregon Bar river access feature. The partial and intermittent views of these locations would not be substantially negatively altered over the long-term. Recreation trails would be closed periodically throughout the construction period minimizing the visual effects upon recreationists.

The appearance of the pump station and intake/diversion structures would be improved over the existing condition. The pumps would be within a specific block enclosure of a light neutral/earthtone color to blend with the surroundings. Closure of the bypass tunnel under the Proposed Project would be performed in such a way as to blend with existing formations. Increased use of the site for recreation-related activity would change the look of the area from some of the residential and trail viewpoints. Because these uses are consistent with the planning goals for the area and would be managed to minimize the number of people and hours of use, these changes would be considered less than significant. Additionally, all amenities to be provided would be designed in compliance with CDPR guidelines.

Reductions of river flows and reservoir elevations associated with the Action Alternatives and related changes to CVP operations would not result in adverse visual effects; with few exceptions water surface or flow fluctuations generally would be within ranges experienced under the existing condition for all alternatives. Occurrences of flows or surface water elevations below the existing condition would not be of sufficient frequency to result in an overall long-term change in visual character. No significant cumulative impacts upon visual resources would be expected. Changes within the SWP system, however, due to increased system demands may result in potentially significant impacts upon visual resources of the lower Feather River and at Oroville Reservoir. These effects would occur even without implementation of the project or future CVP actions.

Cultural Resources

No sensitive cultural resources or historic properties are known to occur within the Area of Potential Effect (APE) at the project site or within the construction zone of the alternatives. The high level of past disturbances at the site from Auburn Dam construction activities make it unlikely that any buried cultural resources remain within the APE. The construction management plan for the selected alternative would include standard federal and state measures to be implemented in the event buried cultural resources or human remains are uncovered.

Reductions or increases of river flows and reservoir surface water elevations below or above those typically experienced have the potential to expose resources that are usually inundated or to inundate resources that have already been exposed. In most locations within the study area, river flows and surface water elevations at reservoirs would be within ranges similar to the existing condition and would not result in an increased potential for damage or exposure of cultural resources. At Shasta Reservoir, however, under the cumulative condition, reduction of the surface water elevation below minimum levels anticipated for existing conditions would be potentially significant, and the contribution of the Action Alternatives' to this condition would be considerable. Reclamation has initiated consultation with the SHPO regarding this potential impact. Implementation of an Action Alternative would, therefore, include development and implementation of a Programmatic Agreement with SHPO to adequately address the potential concerns related to changes in Shasta Reservoir elevations. The National Advisory Council on Historic Preservation and other interested parties would participate in the development of the terms of the agreement to ensure protection of known or potential resources at this location. These efforts would mitigate this potential impact to less than significant.

Increased future demands upon the SWP system also would result in potential for increased exposure of cultural resources along the lower Feather River or in the Oroville Reservoir drawdown zone. The Action Alternatives would not contribute to these effects.

Power Supply

Increased North Fork American River diversions and associated changes in CVP operations would result in minor reductions of gross CVP hydropower generation and dependable capacity and increase water supply pumping energy requirements for the Folsom Reservoir pumping plants (Folsom and El Dorado Irrigation District (EID)). Under the cumulative condition, these effects would be potentially significant. Future demands upon the SWP system also would result in potentially significant impacts upon power supply at Oroville Reservoir. The assessment of the

Action Alternatives' incremental contribution to these impacts indicate a less than significant change.

Land Use

Project Area Land Use

The Proposed Project would result in closure of the bypass tunnel in compliance with the State Attorney General's office direction to do so; the other alternatives would result in a conflict with this direction, as the tunnel would remain open. River restoration and the interim public access facilities, under the Proposed Project, would be consistent with the long-range planning goals of Reclamation and CDPR for uses in the Auburn SRA. The other alternatives would not result in these improvements. No land use designations or zoning changes would be required, although all alternatives would result in increased water supply utility-related activity, either seasonally, or year-round. No businesses, homes or individuals would be displaced as a result of any of the alternatives.

Placer County Water Agency Water Service Area Growth Inducement

Rapid growth has occurred in Placer County since the mid-1980s and growth demands have pushed the limits of PCWA's existing water supply delivery means from both the Drum-Spaulding Project and the MFP seasonal pump station. Further growth and development have been approved through local planning process (i.e., different City and County general plans).

PCWA's need for a larger pump station and the added capacity associated with it does not increase the quantity of PCWA's existing water entitlement. The proposed larger pump station facility would only enable PCWA to withdraw the quantity of water to which it is rightly entitled under the law, in accordance with its Federal Energy Regulatory Commission (FERC) license and two Water Rights permits granted by the SWRCB.

It is the responsibility of planning agencies to foresee future needs and try to develop land use development alternatives that will meet impending demands while being environmentally sound and beneficial to the overall needs of the community. PCWA does not possess land use regulating authority; however, it is PCWA's mandate to meet water demand within its service area. Provisions in existing state and county planning efforts running through 2030 have anticipated what future water supply demands will be under mid-range growth and build-out projections, and have established alternative water sources within the Central Valley as well as other combinations of efforts including reduction over time in the amount of MFP water supplied to SSWD.

PCWA's legal duties arise in part from the Placer County Water Agency Act, which is found in Section 81-1, et seq., of the appendices to the California Water Code. Section 81-4 of that enabling legislation gives PCWA the power "to do **any and every lawful act** necessary in order that sufficient water may be available for any present or future beneficial use or uses of the lands or inhabitants within the agency, including, but not limited, to, irrigation, domestic, fire protection, municipal, commercial, industrial and all other beneficial uses and purposes." (Emphasis added.) Section 81-4.3 gives PCWA the authority to appropriate and acquire water and...[to] utilize...water for any purpose useful to the agency." Section 81-6 gives PCWA the authority to cooperate and

contract with Reclamation with respect to the "construction of works" for "water supply" and other purposes.

PCWA also is subject to the Urban Water Management Planning Act (Water Code, Section 10610 et. seq.) as amended in 2001 in response to the Legislature's concern that California's water supply agencies might not be engaged in adequate long-term planning. That Act requires PCWA, as an "urban water supplier," to maintain an "urban water management plan" that must identify existing water supply and demand, and must identify any new water sources required to satisfy demand as projected at least 20 years into the future. The projected 20-year water supply must account for "average, single-dry, and multiple-dry water years."

In predicting 20-year water demands, PCWA, like other urban water agencies, must rely on "data from the state, regional, or local service agency population projections[.]" Thus, to the extent that Placer County and its incorporated cities (e.g., Roseville, Rocklin, Lincoln, Auburn and Loomis) anticipate large population increases in their adopted general plans, PCWA is required to identify water sources necessary to serve such planned development, and is not in a position to refuse to comply with that legal obligation as a means of reducing the "growth-inducing" effects of obtaining new water supplies.

The PCWA Surface Water Supply Update for Western Placer County (PCWA 2001) contains an evaluation of the build-out demands under the existing general plans of the cities and the county within its present service area, based on a mid-range estimate of probable growth rates (PCWA 2001). The existing general plans permit development as indicated by the plans, without future evaluation. The Surface Water Supply Update indicates that the build-out demands that are documented in those plans extend to 2030 and require and additional 70,000 AF of water to be supplied by PCWA. These water demand projections assume PCWA's continued implementation and support for water use efficiency measures, as state on page 1-6 of the Draft EIS/EIR.

PCWA's Surface Water Supply Update report, which shows PCWA's long-term need for the construction of new diversion, treatment, transmission and distribution infrastructure facilities, from both the American and Sacramento rivers, of equal capacity to PCWA's existing water supply entitlements in order to meet the future demands of Placer County. Ultimately, the size of these facilities may be smaller in their final phases as PCWA moves forward with planned conservation and water use efficiency measures and others move forward with planned reclamation projects. However, nothing except a building moratorium in Placer County will allay the need to construction the American River Pump Station now.

It is unlikely that a precedent will be set allowing further construction of larger pump stations along the Middle Fork of the American River in the future, because this would require an increase in PCWA's overall water entitlements from a river whose water is already in high demand and highly regulated. Any future request for an increase in water rights allocations or alterations to annual use patterns from existing sources would require extensive and long-term adjudication affecting a multitude of numerous planning policies and regulatory actions. This would include new water rights permits, which would be opposed by downstream users, Reclamation, the Water Forum, and other environmental groups.

Geology and Soils

The No Action/No Project Alternative would not result in changed geology or soils conditions at the site. Development of the Proposed Project or Upstream Diversion Alternative would result in the short-term creation of unstable slopes over the course of construction; however, these areas would be stabilized prior to re-opening the site for public access. Additional geotechnical investigations would be conducted based on the final design to develop site-specific construction and slope stabilization methods and refine facility placement. Monitoring of construction activities would be performed by a registered geotechnical engineer. Public use of the river area under the Proposed Project would result in the potential to increase exposure to unstable areas within the canyon. Measures to minimize these impacts include posting warning signs and enforcing compliance by increased patrolling of the area.

Transportation and Circulation

The No Action/No Project Alternative would not generate traffic above what occurs under existing conditions. Under the Action Alternatives, up to 146 additional construction-related trips (construction workers and supply deliveries) could occur during peak levels of construction activity. On average, the number of additional trips would be up to 116. The project area roads have sufficient vehicle and load capacity to handle the additional trips and heavy construction equipment. Trips along Maidu Drive have the potential to reduce the level of service (LOS) at the Maidu Drive/Burlin Way intersection, if all trips were to occur during the peak 15-minute morning period when commute traffic and school-related trips travel through the intersection (8:00 to 8:15 a.m.). To avoid this impact, the Mitigation Plan includes a measure in which Reclamation would ensure that the construction contractor limit personnel travel through this intersection during the morning peak hour (7:15 a.m. to 8:15 a.m.) as an element of the Construction Traffic Management Plan. As part of implementing the plan, Reclamation and the construction contractor also would coordinate with the city public works department, local emergency service providers, and local residents to provide information regarding construction activity and timing.

The Proposed Project also would result in additional vehicle trips along Maidu Drive related to use of the public river access features. On a peak day, up to 206 river access-related trips may occur. Under a worst-case assessment, when these trips, commute trips, and school related travel all occur concurrently during the peak 15-minute period before school, the LOS would decrease from C to D. This LOS does not require mitigation by City of Auburn standards. Overall, the Proposed Project traffic impact would be less than indicated because (1) typical use of the river access area would generate less traffic than assumed for peak holiday and summer weekend use; (2) peak use periods would not coincide with commuter an school-related trips; and (3) river access trips would not occur during the morning peak hour. This impact is considered to be less than significant.

An assessment was performed to evaluate potential pedestrian impacts related to increased travel along Maidu Drive. The results indicate that current pedestrian use of Maidu Drive (15 pedestrians in morning peak hour before school) does not reach California Department of Transportation (CALTRANS) thresholds that would warrant implementation of additional actions such as crossing guards (30 pedestrians), warning beacons (40 pedestrians) or traffic signals (70 pedestrians).

Under cumulative conditions, the LOS would decrease at the Maidu Drive/Burlin Way intersection whether the Proposed Project is constructed or not. Future subdivisions all would be required to pay City of Auburn mitigation fees for use toward implementation of traffic control measures. The Proposed Project Mitigation Plan includes payment of mitigation fees to the City of Auburn. No further mitigation is required.

Air Quality

The Proposed Project and alternatives would result in increased emissions of ozone precursors (reactive organic gases (ROG) and nitrous oxides (NO_x)) and particulate matter of less than 10 microns in size (PM_{10}). The evaluation used thresholds of significance and construction emission calculation worksheets from the Placer County and El Dorado County air pollution control districts. With the exception of NO_x emissions during construction of the Proposed Project, all other air pollutant emissions of concern would be below the significance thresholds and would be considered less-than-significant impacts. For the Proposed Project, all feasible NO_x emission control measures would be implemented, however, the ability to reduce these emissions below the APCD quarterly emission threshold is unknown. The Mitigation Plan includes a measure to ensure that Reclamation and the construction contractor would work with the Placer County and El Dorado County APCDs to ensure this impact is reduced to the extent possible. This would remain a potentially significant impact. This impact also would be cumulatively considerable in the event other construction activities in the air basin are unable to fully mitigate for NO_x emissions. Emissions of ROG and PM_{10} would be reduced below the quarterly emission threshold for all other conditions through the implementation of standard vehicle and dust emission controls recommended by the APCDs. An air quality monitoring program and emissions inventory documentation would be undertaken to ensure emissions would be maintained below the construction thresholds.

The Action Alternatives would result in additional travel to the project site for operation and maintenance visits. The vehicular emissions from these trips would not be significant. In addition to project operation trips, the Proposed Project would result in up to 206 river access-related trips in the project study area, on a peak recreation day (anticipated to occur on summer weekends and holidays, if the facilities are open for use). The air pollutant emissions associated with these trips would be well below the Placer County and El Dorado County air pollutant thresholds of significance for all pollutants of concern (ROG, NO_x and PM_{10}) for 2005, 2010 and 2015.

Operation of the pump station facilities would not result in a substantial increase in emissions of pollutants of concern.

Noise

Existing noise levels exceed the City of Auburn noise standard for residential land uses adjacent to the project area. The extended operational period under the No Action/No Project Alternative would result in a potentially significant unavoidable impact (noise levels that do not comply with City ordinance). Construction of one of the Action Alternatives would result in increased noise levels at the project site. The Mitigation Plan requires that Reclamation ensure the construction contractor implement all noise reduction measures and schedule noise-generating construction activities within hours specified by local noise ordinances (i.e., City of Auburn, Placer County and

El Dorado County). Implementation of these measures reduces construction-related noise impacts to levels considered less than significant. Additionally, Reclamation would implement a public notification program to provide local residents and other interested parties with information regarding the timing of construction activities.

Operation of the pump station under one of the Action Alternatives would result in lower noise levels, relative to the seasonal pump station, as the new pumps would be enclosed in a stone-walled structure that would be designed and constructed to provide noise attenuation to comply with the City of Auburn noise standards.

The additional noise sources associated with the Proposed Project include increased use of the project area for river access. Estimated increases in traffic noise along neighborhood roadways would be less than 3 decibels (dB), which is not perceptible to the human ear. Additionally, within the Auburn SRA, Reclamation would require CDPR to enforce the provisions of CCR 4320 - Peace and Quiet, which regulates use of noisy devices (such as machinery or electronic equipment). Overall, the increases noise levels associated with the Proposed Project would not be significant.

Public Health and Worker Safety

Hazardous Materials Use and Storage

The No Action/No Project Alternative would not substantially change practices related to hazardous materials use or storage on-site compared to the existing condition. Presently, there are no hazardous materials stored on-site. Construction of the Action Alternatives would result in a substantial short-term increased use and storage of commercially available but potentially hazardous materials (e.g., fuel, paint, solvents, oils, concrete curing compound) and explosives at the project site potentially increasing public exposure and worker safety risks due to use of these substances. Additionally, the Action Alternatives involve substantial amounts of excavation and blasting, including serpentine rock that may result in the release of asbestos fibers to the air and surrounding environment. The Mitigation Plan for the selected alternative would include extensive public and worker protection measures to minimize risk and reduce exposure to such materials.

Fire Management - Project Construction

Reclamation would review and approve and ensure that the construction contractor prepare and carry out an effective fire protection and prevention program covering all phases of construction for the selected alternative. Representatives of CDFFP and/or other local fire protection agencies would participate in the construction conferences before and during project construction to explain fire hazards and procedures for protection and prevention. The construction contractor would be required to provide and maintain fire suppression supplies and tools and, at all times when work is in progress, a sufficient number of employees familiar with use of the equipment. Construction fire breaks would be created in areas where grass, brush, or other natural fuels are present and where roads or creek beds will not serve the purpose. The firebreak would be within the right-of-way acquired by the government and consist of a 10-foot wide strip with flammable material either cleared or covered with mineral soil. All construction operations shall be in compliance with

Reclamation Construction Safety Standards and other applicable federal and state codes that regulate construction fire protection and prevention.

Fire Management - Auburn SRA and Public River Access Use

Increased public use of the Auburn Dam and Oregon Bar areas at the site and of the North Fork American River from the confluence and downstream past the project area introduces an increased fire risk associated with human activity in the canyon. Reclamation, CDPR, and the California Department of Forestry and Fire Protection (CDFFP) are preparing a comprehensive fire prevention and suppression plan for the Auburn SRA, including the project area. The plan will be in place prior to opening the site for public access.

A Comprehensive Fire Management Plan is being prepared through coordination and consultation with local agencies, including Fire Safe Councils for the Auburn Dam and Reservoir Project lands. As part of this effort, CDPR, CDFFP, and Reclamation have prepared an Auburn State Recreation Area Prefire Management Plan (January 2002). This plan is included as Appendix A to the Final EIS/EIR.

The Comprehensive Fire Management Plan will include all aspects of public and firefighter safety and prevention and fire suppression activities. The Fuels Management Action Plan component of the Comprehensive Fire Management Plan has been completed and is included in the Prefire Management Plan. This element provides out a process to implement fire management strategies for the Auburn SRA lands that are a priority interface with the Greater Auburn Area. As a major component of mitigation for the potential of increased fire danger on public lands within the interface areas directly affected by the American River Pump Station Project, ground implementation of the Fuels Management Action Plan is planned to be completed prior to opening the area for public use. Through coordination and partnerships with local neighborhoods, citizen groups, and others, CDPR and Reclamation, will work to implement appropriate fire management strategies as prescribed in this plan. The interface lands will be divided into priority areas with each having its own site-specific environmental review process.

Shaded fuel breaks will be developed on public lands that interface private lands directly affected by the American River Pump Station Project. Creating a shaded fuel break involves carefully planned thinning of dense vegetation, intended to inhibit fire from easily moving from ground into the overhead tree canopy. A shaded fuel break does not involve the removal of all vegetation in a given area. Shaded fuel breaks, to be most effective, must be accomplished in conjunction with the other prescriptions, such as defensible space and defensible landscapes, which would occur largely on adjacent private properties. The managing partners of the comprehensive fire plan are working with local entities and citizen groups to implement the Fuels Management Action Plan.

Shaded fuel breaks also would be constructed along the public river access roads and around the proposed parking and vehicular turnaround areas. Access road improvements would meet emergency vehicle access needs. Additionally, CDPR would prohibit open fires within the project area which would reduce the risk of wildfire potentially related to increased public use.

Indian Trust Assets

Indian Trust Assets (ITAs) are legal interests in property and rights held in trust for Indian tribes or individuals by the United States and include Indian reservations, rancherias, and allotments. No ITAs have been identified within the project study area. The Proposed Project or alternatives would not result in adverse impacts to ITAs.

Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act requires federal agencies to consult with NMFS regarding potential impacts on EFH. EFH only applies to commercial fisheries and includes identified waters and substrate necessary for spawning, breeding, feeding, or maturing. In the study area, EFH includes the lower American River to Nimbus Dam, waters of the Delta, the Sacramento River up to Keswick Dam, and tributaries up to impassable barriers for chinook salmon habitat. Implementation of the Proposed Project or alternatives would not be expected to adversely affect fall-run chinook salmon essential fish habitat.

Environmental Justice (Executive Order 12898)

No disproportionately high or adverse environmental or human health effects on minority or low-income communities would be expected to occur with implementation of the Proposed Project or alternatives.

Irreversible and Irretrievable Use of Resources

Implementation of the Proposed Project or alternatives would result in the irreversible commitment of construction materials, labor, land area devoted to facilities, and energy required for construction, operation, and maintenance.

Under the Upstream Diversion Alternative, up to 0.11 acre of wetlands would be permanently lost in the area. This loss would be mitigated through replacement, creation, or mitigation banking as determined appropriate through resource agency permitting.

Short-term Use of the Environment Versus Long-term Productivity

Installation of a year-round pump station would increase the reliability and availability of water supplies for PCWA. This increased reliability and availability would help PCWA meet current and projected demands, thus supporting economic viability of the project service area. The Proposed Project or Upstream Diversion Alternative would have short-term impacts on air quality, habitat for wildlife species, recreation, and noise, but these impacts would not be expected to alter the long-term productivity of the natural environment.

The Proposed Project includes restoration of the currently dewatered segment of the North Fork American River, resulting in increased habitat availability for fish and aquatic resources in the project vicinity. This habitat alteration represents a long-term beneficial effect for fish resources and aquatic habitat. Additionally, fish passage conditions through the project area would be

greatly improved through river restoration, providing a long-term benefit to fish species of the American River.

The Proposed Project would have long-term beneficial effects on water supply, fish and terrestrial resources and recreation. On balance, these long-term improvements or benefits outweigh the potentially significant short-term impacts to the environmental resources in the project area.

Endangered Species Act Compliance

The USFWS and NMFS have defined the different conclusions and determinations that can be reached through consultation with these agencies. These different conclusions are *"it is likely to adversely affect," "it is likely to jeopardize proposed species/adversely modify proposed critical habitat" and "it is not likely to adversely affect"* (USFWS and NMFS 1998). *"It is likely to adversely affect"* is the appropriate conclusion if any adverse effect to listed species may occur as a direct or indirect result of the proposed action, or indirect result of the interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial. In the event the overall effect of the proposed action is beneficial to the listed species, but also is likely to cause some adverse effects, then the proposed action *"is likely to adversely affect"* the listed species. If incidental take is anticipated to occur as a result of the proposed action, an *"is likely to adversely affect"* determination should be made (USFWS and NMFS 1998). *"It is likely to jeopardize proposed species/adversely modify proposed critical habitat"* is the appropriate conclusion when the action agency or USFWS and/or NMFS identify situations where the proposed action is likely to jeopardize the proposed species or adversely modify critical habitat. If this conclusion is reached, conference is required (USFWS and NMFS 1998). *"It is not likely to adversely affect"* is the appropriate conclusion when effects on listed species are expected to be discountable, insignificant, or completely beneficial (USFWS and NMFS 1998).

Based on analysis of the existing environment in the Proposed Project area, the habitat status in the Proposed Project site, the regional study area, and potential project effects, it is concluded that the Proposed Project is not likely to adversely affect federally listed fish species, nor is it expected to jeopardize the continued existence of any federally listed species.

Overall, in the Sacramento River and the Delta and according to the definitions described above, the Proposed Project relative to the existing condition is not likely to adversely affect the Central Valley ESUs of steelhead, spring-run chinook salmon, fall-run and late fall-run chinook salmon, Sacramento winter-run chinook salmon, delta smelt, and Sacramento splittail. Long-term water temperatures in the upper Sacramento River would not change relative to the existing condition, and monthly mean water temperatures would remain essentially equivalent under both scenarios. Long-term average flow in the lower Sacramento River (i.e., Freeport) would not change more than 0.2 percent during any month of the year, and monthly mean water temperatures would remain essentially equivalent in all but one year of the simulation. Long-term average water temperatures at Freeport would not change more than 0.1ºF during any month of the year. In the Delta, reductions in long-term average Delta outflow would be up to 0.3 percent, and there would be no change in X2 position for any given month of the February through June period. Moreover, Sacramento winter-run chinook salmon, Central Valley spring-run chinook salmon and fall-run and late fall-fun chinook salmon would not exhibit any substantial long-term increase in absolute early-lifestage survival, and reflect either slight increases or minor decreases in relative early-

lifestage survival. Therefore, based on these results, a conclusion of *"it is not likely to adversely affect"* is warranted. Also, impacts to Critical Habitat that includes the Sacramento River and the Delta are likely to be insignificant, and discountable. For further discussion and additional detail regarding the Proposed Project effects on water temperature, flows, early-lifestage salmon survival, Delta outflow, and X2 position, please refer to Section 3.5 and the Cumulative Report (Appendix D of the Draft EIS/EIR).

In the lower American River, the Proposed Project is not likely to adversely affect fall-run chinook salmon, steelhead or Sacramento splittail. Under the Proposed Project, there would be minor decreases in flow and increases in water temperature in some years, although these changes will be accompanied by minor flow increases and water temperature decreases in other years. Slight increases in long-term average absolute and relative early-lifestage fall-run chinook salmon survival would occur under the Proposed Project relative to the existing condition. Under the Proposed Project, potential differences in flow and water temperature are expected to have a less-than-significant impact on fall-run chinook salmon, steelhead, and Sacramento splittail. Of these species, Critical Habitat previously was designated only for steelhead, although the designation recently was withdrawn. Adverse modification of Critical Habitat is defined as "*...a direct or indirect alteration that appreciably diminishes the value of Critical Habitat for both the survival and recovery of a listed species* [50 CFR §402.02]." The phrase "*appreciably diminishes the value*" is further defined as "*...to considerably reduce the capability of designated or proposed Critical Habitat to satisfy requirements essential to both the survival and recovery of listed species* (USFWS and NMFS 1998)." The minor changes in flow and water temperature in the lower American River do not "*appreciably diminish the value*" of steelhead habitat. Nonetheless, potentially significant flow-related impacts on steelhead rearing and potential Sacramento splittail spawning habitat in the lower American River were identified for the cumulative versus ESA baseline comparison. Therefore, for the lower American River, it is concluded that the Proposed Project is not likely to adversely affect the federal candidate or listed species, and the cumulative condition is not likely to affect fall-run chinook salmon but may adversely affect but not jeopardize the continued existence of the federally threatened steelhead and Sacramento splittail.

In the upper American River, construction, operation and maintenance of the Proposed Project is not likely to adversely affect the federally threatened bald eagle. As previously discussed, construction-related increases in noise and human activity at the Proposed Project site would not be expected to disturb the bald eagle because they are rarely seen and are not known to nest in the area. Individuals foraging in the area could easily use other similar or higher quality habitats in the canyon. Most of the construction activities would occur in a previously dewatered part of the river channel that contains no roosting habitat for the bald eagle. Moreover, operation activities would likely disturb bald eagle at a level below existing conditions, because the annual installation and dismantling of seasonal facilities would not be necessary. In addition, operation and maintenance of the Proposed Project is not likely to adversely affect the federally threatened valley elderberry longhorn beetle (VELB). Backwater ponds, open water habitats, and cottonwood forest in the lower American River would not be expected to be significantly altered under the Proposed Project, relative to the existing condition; therefore, elderberry shrub and Critical Habitat for VELB would not be expected to be adversely affected.

Environmentally Superior Alternative

The environmentally superior alternative is the one that minimizes significant, or potentially significant, changes in the physical environment and meets the project objectives to the extent possible. The Proposed Project would have long-term beneficial impacts to water supply, fish and terrestrial resources, and recreation. On balance, these long-term benefits outweigh the potentially significant short-term impacts to environmental resources in the project area. The Proposed Project would be considered environmentally superior to either the No Action/No Project Alternative or Upstream Diversion Alternative.

Agency Preferred Alternative

The Proposed Project is Reclamation's preferred action. This alternative would result in closure of the bypass tunnel, as directed by the State Attorney General's office. Additionally, the Proposed Project would satisfy the terms of the MOA between Reclamation and the state regarding improved public safety access at the site. PCWA's project objectives would be satisfied through implementation of either the Proposed Project or the Upstream Diversion Alternative.

Mitigation Monitoring and Reporting Program/Environmental Commitments Plan

The Mitigation Plan will identifies measures to be incorporated into the design, construction, operation, and maintenance practices for the selected alternative. These measures are included in the summary table (**Table S-5**), and in most instances, would be anticipated to reduce impacts to levels considered less than significant. The Mitigation Plan is included as Appendix D to the Final EIS/EIR. As part of the decision-making process for the project, the lead agencies would approve and adopt the Mitigation Plan measures appropriate to the selected project alternative. Table S-5 provides a summary of impacts and mitigation measures for the project alternatives. Impact issues are summarized by resource topic, in the same order as presented in the Final EIS/EIR, and compared between alternatives. The impact significance statement assumes implementation of identified environmental protection and mitigation measures. These measures reflect those included in the Mitigation Plan. If an impact is found to be less than significant, then no mitigation measures have been proposed. Additionally, if there are no feasible measures or alternatives, or if the project alternatives do not have a considerable contribution to the potentially significant cumulative impacts, then no mitigation is required or proposed.